Tactical Simulation Interface Unit (TSIU) (WRAP Candidate)





MISSION

Provide an interface between simulation/simulators and elements of the Army Battle Command System (ABCS) and other automated command and control systems; provide staff and commanders the opportunity to train, rehearse missions, or refine tactics, techniques, and procedures, at command, control, communications, computers, and intelligence (C4I) workstations, and as a collective battle staff.

DESCRIPTION AND SPECIFICATIONS

The Tactical Simulation Interface Unit (TSIU) generates tactical messages compatible with elements of the Army Tactical Command and Control System (ATCCS), Force XXI Battle Command Brigade and Below (FBCB2), and the Global Command and Control System (GCCS). These messages originate in simulation or simulators supported by the Distributed Interactive Simulation (DIS) standard. Signal Protocol Data Units (PDUs), or Command and Control Simulation Interface Language (CCSIL) messages transport data from simulation/simulators to the TSIU. The TSIU provides twoway message traffic between the tactical system and the simulation environment. The system runs on a SUN platform and can provide messages via local area networks (LANs) or serial links. The TSIU supports the following protocols: Variable Message Format (VMF); Joint Variable Message Format (JVMF); United States Messages Text Formats (USMTF); Moving Target Indicator and Position (MTI); Tactical Data Link-B (TADIL-B); Tactical Data Link-A (TADIL-A); Tactical Data Link-J (TADIL-J); Tactical Information Broadcast Service (TIBS); TRAP Data Dissemination System (TDDS); and FAAD Data Link (FDL). The TSIU is deployable for training purposes worldwide.

FOREIGN COUNTERPART

No known foreign counterpart

FOREIGN MILITARY SALES

None

PROGRAM STATUS

Transition of the TSIU to the high-level architecture (HLA) protocol has begun and will be completed in FY01. The TSIU currently is used in Atlantic Command, Central Command, European Command, U.S. Forces Korea, Forces Command, Army Space Command, and U.S. Army Training and Doctrine Command. Improvements that are planned in the upcoming fiscal year include adding a robust graphical user interface (GUI), porting the HLA version to an NT, adding additional message capability, and building on a training class.

PROJECTED ACTIVITIES

- Roving Sands
- III Corp Warfighter
- Lucky Sentinel
- Digital Battle Staff Trainer
- JCF Advanced Warfighting Experiment
- DCX

PRIME CONTRACTORS

The TSIU is government-owned software and is maintained by the Space and Missile Defense Battle Lab (SMDBL) (Huntsville, AL). SMDBL's prime contractor for this project is Coleman Research Corporation (Huntsville, AL).



^{*} See appendix for list of subcontractors

